WHAT IS CLAIMED IS:

1. An electric welder for spot fusing a eutectic metal to a thin film electrical conductor on an electrically non-conductive substrate, comprising:

at least one pair of an electrode, at least one said electrode having a terminal end that is tapered tangentially to a domed terminus; and

said domed terminus having a radius sufficiently small to concentrate an electrical current to produce a heat cone and penetrate said eutectic metal and sufficiently large to prevent an intolerable damage to any of said eutectic metal, said thin film, and said substrate.

2. The welder of claim 1, wherein:

said substrate is a lid for an IC package made of ceramic or glass, said thin film is made substantially of gold, and said eutectic metal is a frame therefore made substantially of an alloy of 80% gold and 20% tin; and

each said electrode is made of and alloy of copper tungsten.

3. The welder of claim 1, wherein, said spot fusing is accomplished by pulsing said electrical current from a discharging capacitor through said electrode pair.

4. A method of using the welder of claim 1 for spot fusing a eutectic metal to a thin film electrical conductor on an electrically non-conductive substrate, comprising:

placing said eutectic metal in registration contact with said thin film;

pressing a pressure block against said eutectic metal;

pressing at least one of said electrode pair of the welder of claim 1 into contact with said eutectic metal under sufficient pressure to displace a tiny bit of said eutectic metal against said thin film;

pulsing an electrical current through said electrode pair of sufficient energy to cause a localized heating and melting of said eutectic metal;

allowing said eutectic metal to cool and thereby solidify; and

removing said electrode pair and said pressure block therefrom.